

# ALLEY THEATRE

Gregory Boyd, *Artistic Director*    Dean R. Gladden, *Managing Director*

December 29, 2014

Chairman Tom Wheeler  
Commissioner Mignon Clyburn  
Commissioner Jessica Rosenworcel  
Commissioner Ajit Pai  
Commissioner Michael O'Rielly  
c/o Marlene H. Dortch, Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20554

Re: Comments in ET Docket No. 14-165 and GN Docket Nos. 12-268 and 14-166 Via Electronic Filing

Dear Chairman Wheeler, Commissioner Clyburn, Commissioner Rosenworcel, Commissioner Pai, Commissioner O'Rielly and Ms. Dortch:

On behalf of the Alley Theatre, located in Houston, Texas, that provides approximately 496 performances a year to 180,000 audience members and education programs to 60,000 students, I write with concern about protection for our wireless microphones and backstage communications devices.

I understand the Commission has ruled that performing arts entities that regularly use 50 or more wireless devices will be eligible to apply for a Part 74 license. I've also learned that the FCC is seeking Comment on a proposed rule that would prevent performing arts entities using fewer than 50 wireless devices from participating in the database. This would leave my organization without any interference protection mechanism from the many TV Band Devices that may soon flood the market. Frequency coordination with other known wireless microphone users has become common practice, but there is no way to coordinate with TVBD's if you don't know about them.

Thousands of performances are held by professional performing arts organizations each year and the use of wireless microphones is both essential to producing high-quality performances and also mitigates against significant public safety concerns. Professional wireless capability, with successful interference protection, is essential to our sector.

The information that the FCC has requested follows:

1. What type of wireless devices do you use?

We use both lavalier and handheld wireless microphones, IFBs which are used for both monitoring and wireless speakers, and wireless communication devices.

2. How many units do you use in a typical presentation or performance?

We use anywhere from 8 to 40 wireless devices in a typical performance.

3. How frequently do you offer presentations that use wireless devices?

Every performance uses wireless devices from microphones to communication devices. There is not a show that we present without wireless devices.

4. What bands and channels do you use?

We use a wide amount of the UHF range. We have wireless in the 470-534 MHz, another wireless bank in the 518-578 MHz band, and other devices which operate in the 600Mhz band. We do have much older equipment in the VHF range (around 200Mhz) that we still use occasionally.

- 4a. Are your microphones able to turn to more than one frequency? How wide is their tuning ability?

Nearly all of our wireless devices are frequency agile, with a fairly wide tuning range (in most cases a range of at least 50 Mhz).

- 4b. Which of your devices are outside the TV bands? What frequencies do they use?

Some of our wireless communication devices are well outside the VHF\UHF band, in the Ghz Range (1.7), but with these devices, radio waves in the Ghz range don't penetrate through walls as well as frequencies in the Mhz band, nor have the range we needed for live performance. With these devices we have multiple antennas setup throughout the building to ensure proper function.

5. Which of your wireless devices are analog and which are digital?

Most of our communication wireless devices are digital. For wireless microphones and IFBs, we own 12 channels of digital wireless, the remainder, about 14 channels, are analog.

6. Do you own or rent your wireless equipment?

We own most of the wireless equipment we use, rarely renting.

7. For equipment that you own, what is its reasonable life expectancy?

We expect at least 10-15 years out of the wireless equipment we own.

8. How did you handle the move out of the 700 MHz band?

We were proactive about moving out of the 700Mhz band, upgrading and then vacating well before the cutoff date, so we had enough time to setup and test our wireless systems to ensure a seamless transition and that we were operating within FCC guidelines.

- 8a. How much did it cost?

The cost in materials was approximately \$45,000.

9. What can the FCC do to ensure that wireless microphone users transition to new, more efficient devices to the full extent possible?

Live producing organizations rely on the VHF and UHF band because of its unique properties that made it very well suited for the high quality audio that our patrons expect from us—the audio reproduction from this frequency range is excellent, and the frequency range is also well suited to the antenna coverage we need.

Wireless coordination is currently a mess. It is very confusing and financially risky to purchase wireless devices with today's guidelines. After the 700Mhz transition, wireless microphone users had been promised 2 "safe zones" of 6Mhz ranges in each major metropolitan area. Here in Houston, as in many other cities, one of our safe zones is in the middle of the 600Mhz which appears will be likely auctioned off in a few years. So any purchases that were planned based on a frequency range we were told was dedicated to us many suddenly no longer be valid. We are purchasing wireless devices with a 10-15 life expectancy with guidelines that shift constantly.

It is not feasible to expect that Live Performance Organizations can sustain the risk of devices with such shortened life. This is apparent from the 700Mhz shift, which led to a glut of perfectly good and working 700Mhz wireless devices that manufacturers couldn't retune cost effectively that ended up sitting in storage that either had to be destroyed, or would end up in the hands of irresponsible wireless users who would use them anyway, hurting those who did all in their power to stick to the FCC's guidelines, and the actual intended users of that frequency block.

10. What would persuade you to move out of the TV band?

For many years now, performing arts organizations, broadcast media, and sports organizations have been able to coexist in a given amount of frequencies. We would be persuaded to move out of the TV band if wireless microphone users were given a dedicated frequency range that is large enough for us, we were given ample time to implement these changes, and we were provided with a credit, perhaps both from the Government and the manufacturers, towards the replacement of equipment that had been purchased fairly recently. Most importantly however, would be rules from the FCC outlining a larger term plan, so we have a structured and more organized approach towards frequency allocation instead of the piecemeal frequency swap that has been occurring most recently.

I appreciate that the Commission has sought Public Comment on these very important issues. Professional performing arts organizations should all have some sort of interference protection. While some entities will be protected by access to the geo-location database, many professional performing arts organizations will not under this plan. Further, I would request that the Commission consider the burden already borne by the performing arts community in vacating the 700 MHz band. I am concerned about the cost of once again replacing my theatre's sound equipment.

Performing arts organizations provide demonstrable service to the public in improving quality of life; preserving our cultural heritage; and in providing education, enlightenment, entertainment. They also contribute to local economies in every community across this country. I respectfully request that the Commission maintain access to interference protection and establish a mechanism to reimburse performing arts organizations for the cost of new equipment.

Sincerely,

  
Dean R. Gladden  
Managing Director